of increase in the coking coal production of requisite metallurgical variety are :—

(i) Depletion of superior variety metallurgical coal reserves in upper seams in Jharia Coalfields resulting in deterioration of quality of raw coal feed to the washeries.

(ii) Geo-mining problems like steep and multiple seams, fires, water logged old workings and builtup surface structure needing protection by sand stowing etc.

(iii) Sub-optimal performance of some of the old coking coal washeries due to ageing as well as deterioration in quality of feed, and

(iv) Power shortages in Bharat Coking Coal Limited areas.

(d) Some of the steps being taken to augment indigenous availability of coking coal, inter alia, include :—

(i) Increase in raw coking coal availability by reorganising existing mines and development of new mines.

(ii) Increasing raw coal feed to washeries by supplying low volatile medium coking coals of suitable quality.

(iii) Early commissioning of two new washeries under construction at Madhuband and Kedla for increasing the existing washing capacity.

(iv) Modification of the existing coking coal washeries by implementation of recommendations of the Altekar Committee to improve the capacity utilisation as well the quality of washed coking coal.

(v) Coking coal mines in Meghalaya and Assam are being identified to make available increased quantities of low ash coking coal.

ASSESSMENT OF COAL RESERVES

2323. SHRI PARMESHWAR KUMAR AGARWALLA : Will the Minister of COAL be pleased to state :

(a) at what depth the coal reserve as proved reserve, indicated reserve and inferred reserve of coal are located;

(b) whether any assessment has been made of these reserves to ascertain the economic extraction of proved reserve of coal; and

(c) if so, what are the details thereof ?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) Estimated depth-wise and category-wise break-up of coal reserves is as under :—

(Million tonnes)

Depth Range	Proved	Indicated	Inferred	Total
0—300 .	52333	53850	22360	128543
300—600	10979	23037	18210	52226
600—1200	1541	8026	3441	13008
0—1200 .	64853	84913	44011	193777

(b) and (c) As bulk of the 'proved' reserves (about 80 per cent) are located at shallow depths, it has been estimated that about 90 per cent of the proved' reserves can be considered mineable. The economics of extraction will, however, depend on the cost structure and the sale price of coal which cannot be ascertained at present.

HEAVY EQUIPMENTS USED FOR FIRE FIGHTING IN COAL MINES

2324. **SHRI PARMESHWAR KUMAR AGARWALLA** : Will the Minister of COAL be pleased to state :

(a) whether it is a fact that to control the coal mine fires, Heavy Earth Moving Equipments (HEMM) like shovels, dozers dumper have been used;

(b) if so, whether it is possible to move these HEMM from one place to the other; and

(c) what are the details including the name of the places from where such Equipments are shifted and the place to which shifted, and also period of such shifting and the costs incurred on the following HEMM (separate for each) :

(a) shovels.

(b) Dozers.

(c) Graders.

(d) Dumpers/Trippers.

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) and (b) To control the coal mine fires, Heavy Earth Moving Machinery (HEMM) like shovels, dumpers and dozers are used for culting trenches, digging out and surface sealing. These equipment being self-propelled and mobile can be moved from one place to another within a reasonable distance.

(c) Details of equipment shifted along with places and period of such shifting with costs incurred hereon, as furnished by Coal India Limited (CIL) are given in the enclosed Statement.

STATEMENT

Name of the Project	Name of the place where equipment diverted	Equipment diverted	Period	Amount incurred
1	2	3	4	5
Lodna	Joyrampur	(i) Shovel—1 No.	Jan 91	Nil
		(ii) Shovel—2 Nos.	Jan 91	Nil
		(iii) 35 T—7 Nos. Dumper	Jan 91	Nil
		(iv) 35 T—1 No. Dumper	Jan 91	Nil
		(v) Dozer—2 Nos.	Jan 91	Nil
Bhalgora	Ena	(i) Shovel—1 No.	1985	Negligible
		(ii) Dumper—5 Nos.	1985	Negligible
		(iii) Dozer—1 No.	1985	Negligible
	Bhutgoria	(iv) Dozer—1 No.	1988-89	Negligible
Block II OCP	X, XI, XII, XIII Seam fire of Block-II	(i) Dozer—1 No.	Used intermittently	Nil
		(ii) Shovel—1 No.		Nil
		(iii) Dumpers—5 No.		Nil